

Appl. No. 10/028,099  
Amdt. dated April 14, 2004  
Reply to Office Action of January 14, 2004

Amendments to the Claims

1. (*Cancelled*)

2. (*Currently Amended*) ~~The method of claim 1,~~ A method for optimization of temporal performance of a network of electronic cells, with a plurality of cells that are taken from a library, having several categories of cells, the cells of a same category all having the same functionality, which method comprises the following steps:

- accurate computation of propagation times of signals which pass through each cell of the network; and

identification of cells which have a computed propagation time value greater than a predetermined reference value,

wherein a predetermined threshold value  $val_j$  is allocated to each cell of,  $rank_j$ , of a same category, and wherein, when a cell of another rank,  $rank_k$ , identified must be replaced by a cell of a higher rank,  $rank_k$ , the value of  $rank_k$  [[is]] being at least equal to  $rank_i + rank_j$ , said computed propagation time value for said cell of rank  $i$  [[is]] being greater than the predetermined threshold value  $val_j$  of said cell of rank  $j$ .

3. (*Currently Amended*) The method of claim 2, wherein, when a cell of  $rank_i$  identified must be replaced by a cell of a higher rank,  $rank_k$ , the value of  $rank_k$  is equal to the sum of  $rank_i$  and  $rank_j$ , if said computed propagation time value for said cell of rank  $i$  [[is]] being within the predetermined threshold values  $val_j$  and  $val_{j+1}$  of said cells of consecutive ranks,  $rank_j$  and  $rank_{j+1}$ .

4. (*Currently Amended*) The method of ~~claim 1,~~ claim 2, wherein execution of a replacement step ~~is subject to validation by a user of the said method, occurs for cells which have a computed propagation time value greater than a predetermined reference value.~~

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5. (Currently Amended) An integrated circuit comprising a network of cells, the temporal performances of which have been optimized by a method comprising:

accurate computation of propagation times of signals which pass through each cell of the network; and

identification of cells which have a computed propagation time value greater than a predetermined reference value,

wherein a predetermined threshold value  $val_j$  is allocated to each cell of rank<sub>j</sub> of a same category, and wherein, when a cell of another rank, rank<sub>k</sub>, identified must be replaced by a cell of a higher rank, rank<sub>k</sub>, the value of rank<sub>k</sub> being at least equal to rank<sub>j</sub> + rank<sub>j</sub>, said computed propagation time value for said cell of rank<sub>j</sub> being greater than the predetermined threshold value  $val_j$  of said cell of rank<sub>j</sub>.

~~computation of propagation times of signals which pass through each cell of the network; and identification of cells which have a computed propagation time value greater than a predetermined reference value.~~

6. (Currently Amended) A receiver device for radio signals, comprising an integrated circuit having a network of cells, the temporal performances of which have been optimized a method comprising:

accurate computation of propagation times of signals which pass through each cell of the network; and

identification of cells which have a computed propagation time value greater than a predetermined reference value,

wherein a predetermined threshold value  $val_j$  is allocated to each cell of rank<sub>j</sub> of a same category, and wherein, when a cell of another rank, rank<sub>k</sub>, identified must be replaced by a cell of a higher rank, rank<sub>k</sub>, the value of rank<sub>k</sub> being at least equal to rank<sub>j</sub> + rank<sub>j</sub>, said computed propagation time value for said cell of rank<sub>j</sub> being greater than the predetermined threshold value  $val_j$  of said cell of rank<sub>j</sub>, by accurate computation of propagation times of signals which pass through each cell of the network; and identification of cells which have a computed propagation time value greater than a predetermined reference value.